Claims

1. A toner for developing an electrostatic latent images comprising colored resin particles containing at least a binder resin and a colorant,

wherein said colored resin particles have a volume average particle diameter (Dv) in the range from 4 to 10μm and an average circularity in the range from 0.930 to 0.995 and,

a zeta potential (E1) of the toner after laid still under a condition at the temperature of 23°C and the humidity of 50% for one day and night is in the range from -50 to -10mV and

a difference is less than 5mV between a zeta potential (E2) of the toner after laid still under a condition at the temperature of 50°C and the humidity of 80% for two weeks and E1.

2. The toner for developing the electrostatic latent images according to claim 1,

wherein the toner has the zeta potential (E1) in the range from -40 to -20mV.

3. The toner for developing the electric images according to claim 1,

wherein the difference between E2 and E1 is less than 3mV.

4. The toner for developing the electrostatic latent image according to claim 1,

wherein soluble component in tetrahydrofran of the toner for developing the electrostatic latent images has an acid value of 4mgKOH/g or less.

5. The toner for developing the electrostatic latent images according to claim 1,

wherein the colored resin particles further containing multifunctional ester compound having a hydroxyl value (a) of 4mgKOH/g or less as a parting agent,

in which a product of an added amount (b) of the parting agent per 100 parts of the binder resin and the hydroxyl value (a) is 40 or less.

6. The toner for developing the electrostatic latent image according to claim 5,

wherein the product of (a) and (b) is 30 or less.

7. The toner for developing the electrostatic latent images according to claim 1,

wherein the toner has the ratio (Dv/Dp) of the volume average particle diameter (Dv) to a number average particle diameter (Dp) in the range from 1.0 to 1.3.

8. The toner for developing the electrostatic latent images

according to claim 1, further containing a charge control agent.

9. The toner for developing the electrostatic latent images according to claim 8,

wherein the charge control agent is a charge control resin having a number average molecular weight of 3,000 to 30,000.

10. The toner for developing the electrostatic images according to claim 8,

wherein the charge control agent is a charge control resin having an acid value in the range from 0.03 to 15mgKOH/g.

11. The toner for developing the electrostatic latent image according to claim 5,

wherein the parting agent is a synthetic wax or a multifunctional ester compound.

12. The toner for developing the electrostatic latent image according to claim 1,

wherein an extract liquid with water from the toner has an electric conductivity σ2 of 20μS/cm or less, in which the extracted liquid with water is obtained in the manner such that the toner is dispersed into an ion-exchanged water having an electric conductivity σ1

so that a concentration of the toner is 6% by weight, the resultant toner dispersion is heated to the boil for 10 minutes, another ion-exchanged water having an electric conductivity σ1 is added to the resultant toner dispersion to the amount of vaporized water to return the capacity of the toner dispersion to the capacity before the boil, and then the resultant toner dispersion is cooled down to the room temperature (about 25°C).

13. The toner for developing the electrostatic latent image according to claim 12,

wherein the σ2 is less than 10μS/cm.

14. The toner for developing the electrostatic latent image according to claim 12,

wherein σ2-σ1 is less than 10μS/cm.

15. The toner for developing the electrostatic latent image according to claim 12,

wherein σ2-σ1 is less than 6μS/cm.